# COLOR Cubes

HUBER+SUHNER

## Coarse Wavelength Division Multiplexer – CWDM
## CWDM bandsplitter 10+8 skip 0, hi-iso

### Features

- CWDM bandsplitter to split and combine 18 CWDM channels in two ports
  - Blue Band: 10 channels 1271 – 1451 nm
  - Red Band: 8 channels 1471 – 1611 nm
- High Isolation between red and blue band
- Micro-hybrid design in a sealed metal housing (COLOR-Cubes)
- Epoxy-free optical path, ITU G.694.2 and Telecording GR1221 compliant
- Extremely small component dimensions: 19 x 15.5 x 9 mm³, other dimensions on request
- Also available as integrated Patch Cord CWDM for flexible system configurations to enable multiplexing without using any board space
- Single mode and multi mode fibers possible, fiber packaging: loose tube or 250 µm coating
- Packaging on line card or in CWDM sub-system for rack mounting on request

### Applications

- Combines / separates 2 bands of the CWDM channel grid
- Metro Core, Metro Access, Metro Enterprise, Cable TV, 3G Telephony (UMTS), Datacomm, WAN, RFTS, Sensor Applications
- Analog and digital transmission systems

### Specifications

| | | |
|---|---|---|
| **Parameters** | Coarse Wavelength Division Multiplexer – 10+8 skip 0 (all values refer to single mode) | |
| **Channels** | separation / combination of 2 bands | |
| **Center Wavelength [nm]** | Port 1: Red Band | 1471 / 1491 / 1511 / 1531 / 1551 / 1571 1591 / 1611 |
| | Port 2: Blue Band | 1271 / 1291 / 1311 / 1331 / 1351 / 1371 / 1391 / 1411 / 1431 / 1451 |
| **Optical Bandwidth (Channel Width @ 0.5dB)** | 1271 - 1451 nm | > 13 nm |
| | 1471 - 1531 nm | > 14 nm |
| | 1551 - 1611 nm | > 15 nm |
| **Insertion Loss *** | < 1.5 dB | |
| **Isolation **** | > 30 dB | |
| | Isolation Spectral Range | 1260-1620 nm |
| **Return Loss *** | > 45 dB (50 dB typ.) | |
| **Directivity** | > 50 dB | |
| **Polarization Dependent Loss** | < 0.2 dB | |
| **Max. optical power** | > 250 mW | |
| **Operating Temperature** | 0°C to 70°C | |
| **Storage Temperature** | -40°C to 85°C (when removed from plastic package) | |
| **Package Dimensions** | 19 x 15.5 x 9 mm³ | |

* With passband, valid over full temperature range and at all states of polarization but without connector losses.
** Valid over full temperature range and at all wavelengths across the channel.

Additional components according to your specifications on request! Please contact Cube Optics for further details.

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### Ordering Information

Indicate your requirements by selecting one option from each configuration table. Please write the corresponding codes in the available boxes to form your part number. For more information on this or other products and their availability, please contact HUBER+SUHNER Cube Optics AG at +49-6131-69851-0 or via email at sales.cubo@hubersuhner.com.

Ordering example: **C-B8-2-A-A-0-S-11-3-B-15**

C - B8 - [ ] - [ ] - [ ] - [ ] - [ ] - 1 [ 1 ] - [ ] - [ ] - [ ] [ ]

| no. of channels | code |
|---|---|
| 2 bands | 2 |

| mux or demux | code |
|---|---|
| mux | M |
| demux | D |
| no destinction* | A |

* uniform losses, works as mux or demux

| optional features | code |
|---|---|
| None | 0 |

| Center wavelengths [nm] | code |
|---|---|
| 1271-1451 & 1471-1611 | A |

| housing | code |
|---|---|
| Standard BSM | S |

| fiber type an packaging | code |
|---|---|
| Corning SMF-28™ (9,125,250 µm) 900 µm loose tube | 1 |
| Corning SMF-28™ (9,125,250 µm) 250 µm coating | 2 |
| Multi mode fiber GI (50,125,250 µm) 900 µm loose tube | 3 |
| Multi mode fiber GI (50,125,250 µm) 250µm coating | 4 |

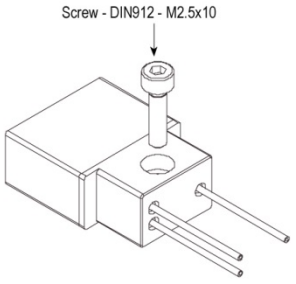
| Fiber length | code |
|---|---|
| 0.5 m | A |
| 1.0 m | B |

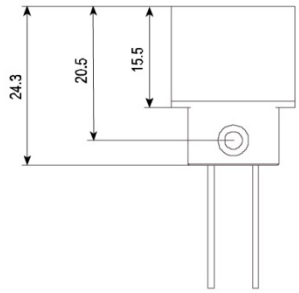
| Connector in/out* | code |
|---|---|
| none | 0 |
| SC/PC | 1 |
| FC/PC | 2 |
| SC/APC** | 3 |
| FC/APC** | 4 |
| LC/PC | 5 |
| MU/PC | 6 |
| E2000 | 7 |
| E2000/HRL** | 8 |
| ST/PC | 9 |

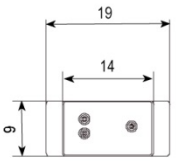
connectors only available in combination with loose tube fiber protection
* device regarded as demultiplexer
** 8° angular polishing

Further configuration on request! Please ask for separate datasheets with grey code.

### Standard BSM housing




units [mm]

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